

Other measurements and soft parts:— An adult male collected on 26th May 1948, to the west of Bamenda, 5° 55' N., 10° 10' E., at 4,500 feet. Wing 66; culmen 20; tail 43; tarsus 17 mm. *Soft parts:*— Iris brown; bill and feet black.

Remarks:— The central mass of the Bamenda highlands appears to form the eastern boundary of the range of the new race, for an adult male in typical *C. r. rubescens* plumage was collected at Barnale, 5° 58' N., 10° 25' E., 3,600 feet, only twenty miles in a direct line from Bamenda, but on the eastern side of the watershed near the headwaters of the Nun River. Another specimen collected on the northern foothills of the Bamenda highlands near Fungom, 6° 32' N., 10° 12' E., 2,500 feet, cannot be assigned to its race for it is a female. The southern and western limits of the new race are not known. A long series of males collected in the vicinity of Kumba, 4° 40' N., 9° 25' E., are all typical *C. r. rubescens*.

The Cardinal Quelea in Nyasaland

by D. N. MANSFIELD

Received 15th March, 1963

On 22nd January, 1963 I found three nests of the Cardinal Quelea *Quelea cardinalis* (Hartlaub), on the outskirts of the town of Lilongwe, Nyasaland. The nests, each of which contained two eggs, were within a few feet of each other and about five feet above the ground, in tall grass among trees in abandoned cultivation. Cape Bishops *Euplectes capensis* (Linnaeus) and Black-winged Red Bishops *E. hordeaceus* (Linnaeus) were also present.

Two red-headed (breeding dress) male queleas were seen. One of them was collected; also a female, a clutch of eggs and a nest. These have been examined by C. W. Benson, who compared the male and female with four males in breeding dress and one female from the Luangwa Valley, Northern Rhodesia, and two males in breeding dress and one female from the Rukwa Valley, south-western Tanganyika, loaned by M. P. Stuart Irwin, from the National Museum, Bulawayo. No difference in colour was noted, except that the male from Lilongwe differs slightly from the other males in having the red on the head a trifle brighter, extending rather further onto the chest, and the belly more markedly yellowish.

Wing measurements in mm. are as follows:— males, Rukwa, 58, 60; Luangwa, 58, 59, 60, 60; Lilongwe, 61; females, Rukwa, 58; Luangwa, 58; Lilongwe, 59.

The eggs, which were fresh, and measure approximately 17 x 12, 17 x 12.5 mm., are very similar in size and colour to the description of two in a clutch of three from the Luangwa Valley (Benson & Pitman, 1956). The nest, like that described in the same reference, is an elliptical ball, but much larger, comparable dimensions in mm. being:— height 150; width 100; width of entrance 30; bottom of entrance 80 from bottom of nest and top 40 from top of nest. Unlike the Luangwa nest, it is not suspended at each side to a bush, but to a grass-stem, probably of a glabrous form of *Panicum maximum*. It is made mostly of the fragments of the panicles of this same species, a few seeds still attached making this identification certain. These grass identifications are by A. Angus, of the Northern Rhodesia Agricultural Department.

Fuggles-Couchman & Elliott (1946) found this quelea nesting in northern Tanganyika, apparently in large colonies, and it was evidently very common. There is no real evidence that this is the case anywhere in the Luangwa Valley or at Lilongwe. J. M. Feely has told Benson that in the Luangwa (Lundazi District) he has seen some ten nests scattered through an area of one acre, together with nests of bishops *Euplectes* spp., in *Pennisetum* and *Phragmites* reeds, on a sand-bank on the edge of a river. This certainly does not fall into the category of a large colony, and the nest recorded by Benson & Pitman (1956) was solitary. Stoehr & Sclater (1906) record the Cardinal Quelea as "moderately common" along the lower Luangwa. But Benson tells me that in the course of 60 miles of travelling on foot through the valley (Fort Jameson District) in February, 1953 he did not see it on more than six occasions (solitary red-headed males distinguished), while E. L. Button has told him that it is also uncommon further north, in the Lundazi District. In spite of fairly intensive work in Nyasaland in the past, mine is the first record of its occurrence in that territory. It appears to be more common in the Rukwa Valley, Vesey-FitzGerald & Beesley (1960) giving it as "frequent", the Red-billed Quelea not merely as "abundant" but "very abundant".

References:

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Notes on *Ducula aenea* (Linn.), particularly the population of the Kangean Archipelago, and *Ducula problematica* Rensch from Sumba

by A. HOOGERWERF

Received 16th July, 1962

Before studying material of these pigeons it seems worth while to pay some attention to Junge's¹ experience when investigating the validity of Büttikofer's *Carpophaga vandepolli*. His paper shows how careful we should be when studying the colour-differences of the greyish feathering because those parts seem to become more vinaceous in skins of birds with much fat. I believe this to be correct and there is a second cause of discolouring of the plumage, viz. the use of petrol to get rid of fat, as I could prove in the Bogor Museum's workshop. Instead of cleaning the skins with hot sawdust, they were immersed in petrol, often for many hours, sometimes for a whole night. Owing to this method, birds from the same locality became very different, though—as could be proved after some experiments—not all *Ducula* skins showed the same striking differences. Probably the fat extracted from the skin by the petrol is partly absorbed by the feathers, discolouring the original tones, startling the taxonomist and leading to false conclusions.

Thus it is proved once more that not only is it necessary to prevent